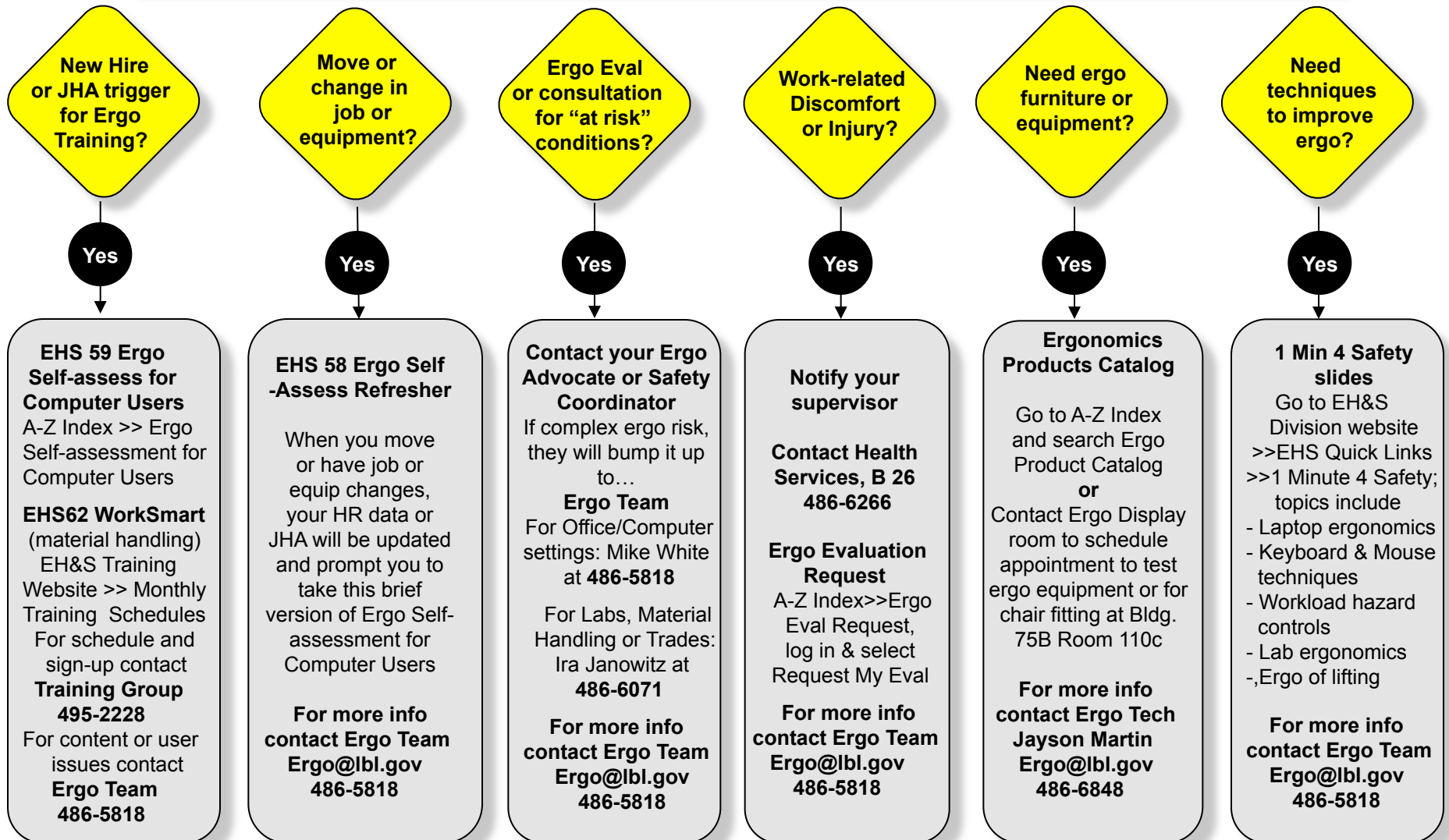


LBNL Ergonomics Resources





Ergo Guidelines for Office & Computer Work



<i>What are the ergonomics hazards of your job?</i>	<i>What do you do to avoid these hazards?</i>	<i>What resources are available to you when you need help?</i>
Repetitive keying & mousing	<ul style="list-style-type: none"> • Take breaks often, at least 5 min./hour • If DISCOMFORT, contact your Supervisor • Use break reminder software • Use keyboard shortcuts & macros 	<ul style="list-style-type: none"> ☑ Pub 3000 Chapter 17 >> Section 17.9.8 Office Ergonomics ☑ RSIGuard break reminder software >> A-Z Index ☑ Request Ergonomics Eval >> A-Z Index ☑ Health Services clinic >> Bldg 26 >> Phone 486-5321
Repetitive mouse clicking/dragging	<ul style="list-style-type: none"> • Don't click+drag with the same hand <ul style="list-style-type: none"> -Use 2 mice (right + left) -Use keyboard shortcuts • Alternate mouse use between hands 	<ul style="list-style-type: none"> ☑ 1 Minute 4 Safety >> EH&S Website >> Quick Links >> <ul style="list-style-type: none"> - Keyboard Shortcuts - Tips to tame your mouse ☑ Ergo Display Room >> Bldg 75B >> test alternate mice
Awkward postures at computer: <ul style="list-style-type: none"> • Phone cradling bet. ear & shoulder • Wrists bent up/down/to the side • Extended reaching to mouse • Prolonged stationary posture 	<ul style="list-style-type: none"> • Adjust workstation/chair • Use headset or speakerphone • Keep wrists straight at key/mouse • Keep mouse close/use forearm support • Sit with foot and low back support • Get up every hour and walk 4-5 min. 	<ul style="list-style-type: none"> ☑ Ergo Self-assessment for Computer Users (EHS59) ☑ 1 Minute 4 Safety >> EH&S Website >> Quick Links >> <ul style="list-style-type: none"> - Keyboard & Mousing Techniques - Monitor Height Adjustment Guidelines ☑ Ergo Team support >> Contact x5818 or ergo@lbl.gov
Heavy workload/spikes in workload	<ul style="list-style-type: none"> • Discuss workload w/ supervisor • Anticipate workload spikes & plan ahead • Take breaks at least 5 min. every hour; change activities over the day 	<ul style="list-style-type: none"> ☑ 1 Minute 4 Safety >> EH&S Website >> Quick Links >> <ul style="list-style-type: none"> - Workload Hazard Controls - Take Frequent Computer Breaks ☑ RSIGuard break reminder software
Lifting/moving heavy objects	<ul style="list-style-type: none"> • Don't lift any object over 50 lbs. • Get help for any item that exceeds your lifting ability, regardless of weight • Use good body mechanics for any lift • Use mechanical lift or cart for heavy or frequent lifts or moves 	<ul style="list-style-type: none"> ☑ WorkSmart training (EHS62)- body mechanics for lifting ☑ 1 Minute 4 Safety >> EH&S Website >> Quick Links >> <ul style="list-style-type: none"> - Safety Tips for Moving Your Office ☑ Facilities Work Request Center (Move and Transport)



Ergo Guidelines for Science Laboratories



<i>What are the ergonomics hazards of your job?</i>	<i>What do you do to avoid these hazards?</i>	<i>What resources are available to you when you need help?</i>
Repetitive pipette use	<ul style="list-style-type: none"> • Take 5-minute rest break every 20 minutes of pipetting • Alternate or use both hands to pipette • Use electronic pipettes where possible • Find best pipette for job: comfortable grip, low weight & force • Stand when working at higher surfaces/equipment; sit when working at lower surfaces • Use forearm rest to reduce load on shoulders • If DISCOMFORT, contact Supervisor & Request Ergo Eval 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> 1 Minute 4 Safety >> EH&S Website >> Quick Links >> - Pipette Ergonomics 1 and 2 <input checked="" type="checkbox"/> Contact Ergo Team support >> Phone x5818 or ergo@lbl.gov for Lab Ergo Training <input checked="" type="checkbox"/> Ergo Display Room >> Bldg 75B >> test alternate pipettes <input checked="" type="checkbox"/> Request Ergonomics Eval >> A-Z Index <input checked="" type="checkbox"/> Health Services clinic >> Bldg 26 >> Phone 486-5321
Repetitive/forceful hand tasks	<ul style="list-style-type: none"> • Find best tool for the job: good fit in hand; low weight & force • Use full hand grip vs. pinch grip • Alternate or use both hands • Adjust chair & work bench layout to avoid long reaches and awkward positions 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> 1 Minute 4 Safety >> EH&S Website >> Quick Links >> - Lab Workstation Ergonomics <input checked="" type="checkbox"/> Pub 3000 Chapter 17 >> Section 17.9.11 Ergonomics Principles >> Section 17.9.13 Hand Tools
Awkward postures at lab bench, hood or microscope <ul style="list-style-type: none"> • Prolonged standing • Forward head/neck and trunk/bending • Head/neck bending at microscope • Static and awkward positions 	<ul style="list-style-type: none"> • Use anti-fatigue floor mats for prolonged standing • Alternate between sitting and standing throughout the day • Try to change type of activity every 20 minutes • Pad areas under forearms, elbows and/or surface edges • Keep under-counter area clear to sit close to your work • Use low profile tubes, containers and waste bins • Stand when working at higher surfaces/equipment; sit when working at lower surfaces • Adjust chair, bench or microscope to avoid awkward positions 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> 1 Minute 4 Safety >> EH&S Website >> Quick Links >> - Lab Workstation Ergonomics - Lab and bench padding options <input checked="" type="checkbox"/> Pub 3000 Chapter 17 >> Section 17.9.11 Ergonomics Principles >> Section 17.9.12 Standing Workstations
Laptop use in labs	<ul style="list-style-type: none"> • Use external keyboard/mouse and elevate the screen • Adjust chair or work surface and use footrest as needed to keep you neck and wrists relatively straight • Take stretch/walk break at least 5 min. every hour 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> 1 Minute 4 Safety >> EH&S Website >> Quick Links >> - Computer Laptop Ergonomics <input checked="" type="checkbox"/> RSIGuard break reminder software
Lifting/moving heavy objects	<ul style="list-style-type: none"> • Don't lift any object over 50 lbs. • Get help for any item that exceeds your lifting ability regardless of weight • Use good body mechanics for any lift • Use mechanical lift or cart for heavy/frequent lifts or moves 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> WorkSmart training (EHS62)- Practical techniques for lifting <input checked="" type="checkbox"/> JHA authorization for lifting > 50 lbs. <input checked="" type="checkbox"/> 1 Minute 4 Safety >> EH&S Website >> Quick Links >> - Safety Tips for Moving Your Office Facilities Work Request Center (Moves, Transport and Rigging)



Ergo Guidelines for Material Handling



<i>What are the ergonomics hazards of your job?</i>	<i>What do you do to avoid these hazards?</i>	<i>What resources are available to you when you need help?</i>
Lifting/moving heavy objects	<ul style="list-style-type: none"> • Don't lift any object over 50 lbs. (See Pub 3000, Chapter 17 for more detail) • Assess the situation: check the size weight of the load; will you have a clear view and path ahead? • Get help for any item that exceeds your lifting ability regardless of the weight • For heavy or bulky objects use a 2- or 3-person lift • Bend at your knees and hips, keeping the inward curve in your back and lift with your legs • Use mechanical lift, cart or assistive devices for frequent lifts/moves • Be sure to wear protective footwear if there is a danger of foot injury • Contact Work Request Center for lifting/ transporting large/heavy objects 	<ul style="list-style-type: none"> ☑ WorkSmart training (EHS62)- Practical techniques for lifting ☑ JHA authorization for lifting > 50 lbs. ☑ 1 Minute 4 Safety >> EH&S Website >> Quick Links >> Ergonomics of Lifting ☑ Division lift team (if one exists) ☑ Facilities Work Request Center (Moves, Transport and Riggers) ☑ Pub 3000 Chapter 17 >> Section 17.9.11.2 Best Practices for Lifting
Repetitive twisting/bending to handle materials	<ul style="list-style-type: none"> • Handle & store frequently-lifted objects between hip & waist height • Handle heavy objects between knee & shoulder height • Slide materials on counters/conveyors vs. lifting/moving • Hold objects close to your body, with feet shoulder-width apart • Don't twist your spine: turn your whole body to move materials • Use mechanical lifts/tables for raising objects from floor, especially if they are large or heavy 	<ul style="list-style-type: none"> ☑ WorkSmart training (EHS62)- Practical techniques for lifting ☑ Pub 3000 Chapter 17 >> Section 17.9.11 Manual Material Handling
Prolonged standing to process materials	<ul style="list-style-type: none"> • Keep the upper body relatively upright • Stand on an anti-fatigue mat if it won't interfere with cart or doorway safety • Adjust the work to the appropriate height and slope when possible • Light duty work should be done at about elbow height • Work that involves lifting or downward force should be lower • Highly precise work should be closer to the eyes, with arms supported • Arrange tools/materials close so you can work with elbows relatively close to your sides and avoid forward bending to reach • Alternate between sitting and standing when possible 	<ul style="list-style-type: none"> ☑ WorkSmart training (EHS62)- Practical techniques for lifting ☑ Pub 3000 Chapter 17 >> Section 17.9.11 Manual Material Handling